

**Notice of Allowability**

Application No.

10/694,679

Examiner

Juanita D. Stephens

Applicant(s)

GOIN ET AL.

Art Unit

2853

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 3/8/2007.
2. ☒ The allowed claim(s) is/are 1-9, 17 and 19-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 2/6/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

Claims 10-16, and 18 are cancelled.

#### ***Information Disclosure Statement***

1. Acknowledgement is made of the Information Disclosure Statement filed 2/6/2004.

#### ***Allowable Subject Matter***

2. Claims 1-9, 17, and 19-23 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach, suggest or render obvious the combination of and ink jet printhead containing flow features having a height dimension and a width dimension formed therein for flow of ink from an ink feed slot through ink flow channels in the thick film layer directly connecting the ink feed slot with the plurality of ink ejection devices for ejection through the nozzle, wherein at least a portion of the flow feature dimensions for at least one of the ejection devices is formed in both the thick film layer and laser ablated in the nozzle plate, and wherein the thick film layer contains at least 12% of the flow feature dimension, recited in claim 1. This invention solves the problem of improving ink flow characteristics.

The prior art does not teach, suggest or render obvious the combination of and ink jet printhead having a thick film layer attached to the substrate and having first portions of ink flow features including an ink chamber and an ink flow channel in flow communication with the ink chamber formed therein for flow of ink directly from an ink

Art Unit: 2853

feed slot through the flow channel to the ink chamber, and a nozzle plate attached to the thick film layer opposite the substrate, the nozzle plate defining ink ejection nozzles and containing second portions of ink flow features formed therein by laser ablation, wherein the first portions are at least 12% of a total of the first and second portions, recited in claim 17. This invention solves the problem of improving ink flow characteristics.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art of Courian et al. (US 6,286,941 B1) teaches that ink is supplied to the vaporization chambers from the ink reservoir through grooves and a plenum to filter impurities rather than **directly** from an ink reservoir to the vaporization chamber through channels.

### **Contact Information**

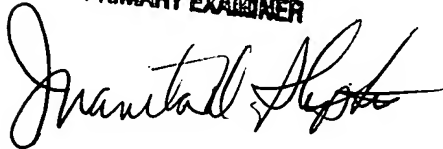
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex (Monday-Thursday 9:00 am -6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JUANITA D. STEPHENS  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Juanita D. Stephens', written over a printed name and title.

Juanita D. Stephens  
Primary Examiner  
Art Unit 2853

JDS  
March 27, 2007